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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,399	03/24/2004	Yoichi Yamada	Q80518	3516
23373	7590	12/02/2005	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			SMITH, RICHARD A	
			ART UNIT	PAPER NUMBER
			2859	

DATE MAILED: 12/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

Office Action Summary	Application No.		Applicant(s)	
	10/807,399		YAMADA ET AL.	
	Examiner		Art Unit	
	R. Alexander Smith		2859	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11 and 14-26 is/are allowed.
- 6) ☒ Claim(s) 1,3-5,9,12 and 13 is/are rejected.
- 7) ☒ Claim(s) 2,6-8 and 10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3-5, 9 and 12 are finally rejected under 35 U.S.C. 102(b) as being anticipated by U.S. 5,587,783 to Nakamura et al.

Nakamura discloses the limitations of claims 1, 3-5, 9 and 12 when:

The image forming apparatus is the preferred embodiment 2 wherein the cylinders 104a-104d (figure 10) break apart the toner, and the toner remainder sensor 103 detects the toner in the second hopper 67b as described for embodiment 2. In particular see column 19, line 1 through column 20, line 32 wherein the control unit 81 holds the signal from the sensor 103 *until the image forming action is over and then rotates* the image forming unit group, i.e., the rotating body with a plurality of developer containers. Column 19, lines 19+ describes monochromatic output, the moving of the group by one revolution, and the repositioning of the unit at position 86 to another position such as at 102M in figure 9, and rotation by half revolution after rotating

the group by one revolution so that the unit may be located at position 86 allowing the sensor 103 to recheck the toner. The above appears to meet the limitations of claim 1 including the last two lines of the claim.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1, 3-5, 9 and 12 are finally rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. 5,587,783 to Nakamura et al.

Nakamura discloses the limitations of claims 1, 3-5, 9 and 12 when:

The image forming apparatus is the preferred embodiment 2 wherein the cylinders 104a-104d (figure 10) break apart the toner, and the toner remainder sensor 103 detects the toner in the second hopper 67b as described for embodiment 2. In particular see column 19, line 1 through column 20, line 32 wherein the control unit 81 holds the signal from the sensor 103 *until the image forming action is over and then rotates* the image forming unit group, i.e., the rotating body with a plurality of developer containers. Column 19, lines 19+ describes monochromatic output, the moving of the group by one revolution, and the repositioning of the unit at position 86 to another position such as at 102M in figure 9, and rotation by half revolution after rotating the group by one revolution so that the unit may be located at position 86 allowing the sensor 103 to recheck the toner.

Furthermore, column 19, line 46 through column 20, line 32 describes the rotation including one revolution at other times and in other situations to address toner coagulation. Therefore, it appears to the examiner that it would be obvious to one of ordinary skill in the art at the time of the invention to have rotation at the start and/or at the end of continuous formation as an obvious modification of the operation, taught by Nakamura et al., to assure that the toner does not coagulate based on the environmental conditions encountered at the location (column 5, lines 15-20).

5. Claim 13 is finally rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura et al. in view of U.S. 6,324,352 to Suzuki.

Nakamura et al. teaches all that is claimed as discussed in the above 102(b) rejection of claims 1, 3-5, 9 and 12 except for a computer and a display device connected to the computer.

Suzuki discloses an image forming system having a computer and a display device (figure 4). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the image forming system, taught by Nakamura et al., to include a computer and a display, as suggested by Suzuki, in order to allow a user to control and monitor the status of the image forming system.

Response to Arguments

6. Applicant's arguments filed September 14, 2005 with respect to claims 1, 3-5, 9, 12 and 13 have been considered but are moot in view of the new ground(s) of rejection or combinations based thereon.

Allowable Subject Matter

7. Claims 11 and 14-26 are allowable.

8. Claims 2, 6-8 and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten to include all of the limitations of the base claim and any intervening claims.

9. As allowable subject matter has been indicated, applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure. The prior art cited in PTO-892 and not mentioned above disclose related apparatus.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to R. Alexander Smith whose telephone number is 571-272-2251. The examiner can normally be reached on Monday through Friday from 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego F. Gutierrez can be reached on 571-272-2245. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'R. Alexander Smith', with a long horizontal flourish extending to the right.

R. Alexander Smith
Primary Examiner
Technology Center 2800

RAS
November 23, 2005